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PREDICTING THE RANDOM: UNDERSTANDING ISLAMIST LONE WOLF TERRORISM

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THESIS

PREDICTING THE RANDOM: UNDERSTANDING ISLAMIST LONE WOLF TERRORISM

by

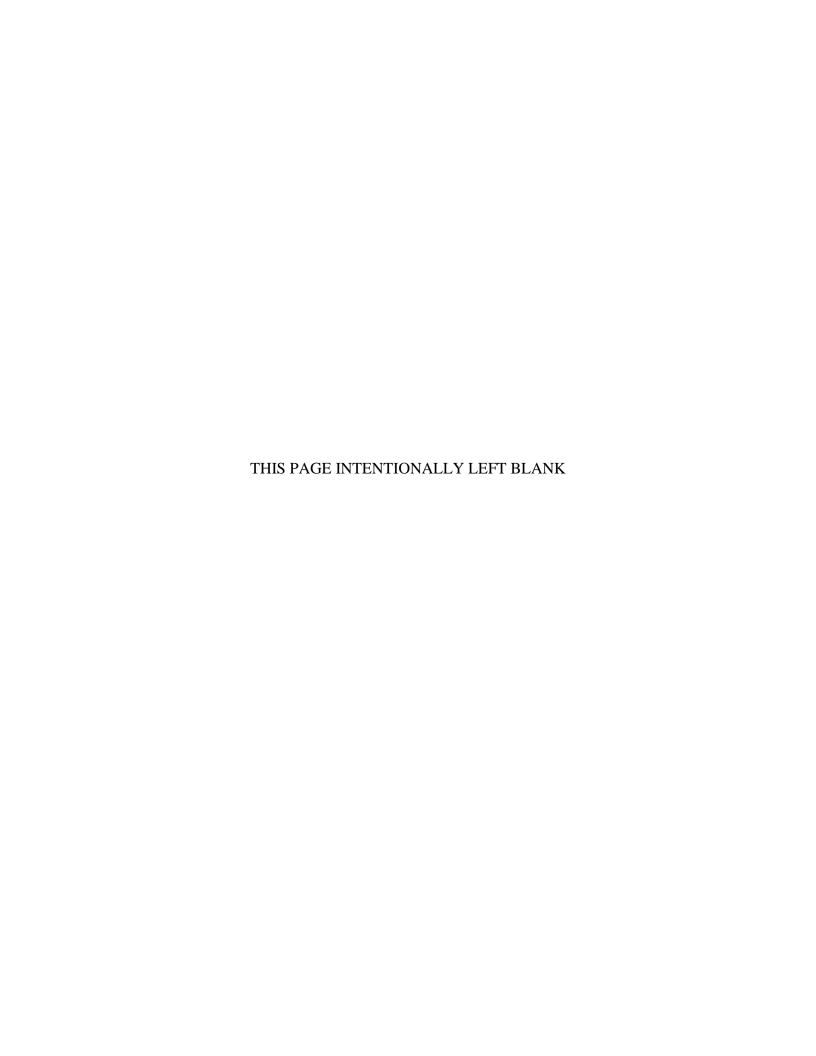Christopher T. Yankow and Riley McEvoy

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Although Islamist lone wolf terrorism seems to be defined by its very randomness, the actors themselves can be predictable. This thesis examines four case studies of seemingly disparate terrorist attacks conducted by Islamist lone wolf actors and identifies seven specific commonalities that contribute to an increased potential for self-radicalization. Furthermore, it examines stochastic violence in the context of 21st century jihad. Today the lone wolf is the weapon of the stochastic terrorist.

The four case studies are 1) Pulse nightclub in Orlando, Florida, 2016; 2) Soldier Readiness Processing Center, Fort Hood, Texas, 2009; 3) Bastille Day, Nice, France, 2016; and 4) San Bernardino, California, 2015.

The seven commonalities are 1) engrossment in radical messaging/propaganda on the internet; 2) first- or second-generation immigrant; 3) reduction of personal effects/finances; 4) affinity with extremist group(s); 5) rapid shift in beliefs or mosque attendance; 6) withdrawal from, or absence of, family/friends/romantic relationships; and 7) sexuality (repression or guilt).

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PREDICTING THE RANDOM:
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I.   INTRODUCTION

Although Islamist lone wolf terrorism seems to be defined by its very randomness, the actors themselves can be predictable. This thesis examines four case studies of seemingly disparate terrorist attacks conducted by Islamist lone wolf actors and identifies seven specific commonalities that contribute to an increased potential for self-radicalization. Furthermore, it examines stochastic violence in the context of twenty-first century jihad. Today, the lone wolf is the weapon of the stochastic terrorist. *Stochastic* is a mathematical term of probability which identifies something as both random and predictable (in that the occurrence is indeed probable). As global jihadist groups increasingly struggle for relevancy and attempt to maintain a global reach, they turn progressively towards stochastic violence as a method to keep the movement alive. By creating a "wiki-narrative" that weaves these acts together into a seemingly interconnected web, terrorist organizations can create a perception of strength and unity otherwise nonexistent.[1]

In 2004, Syrian-born al-Qaeda strategist Abu Musab al-Suri published a 1,600-page manifesto titled *The Global Islamic Resistance Call*. In this work al-Suri proposes the concept of individual jihad or, *jihad fardi*, as one of multiple recommended means to keep the jihadist movement alive amidst increasing pressure from global counterterrorism efforts. Now, following the collapse of ISIS's physical caliphate, it is likely that stochastic violence in the form of *jihad fardi* will increasingly become a favored modus operandi for Islamist terrorist organizations. Groups like ISIS and al-Qaeda in the Arabian Peninsula (AQAP) have become prime enablers of this stochastic violence by circulating incendiary messages calling for individual violent action. Who chooses to act is ostensibly random; however, the likelihood that someone will act is probable and therefore predictable. By identifying the commonalities between those who choose to act, we can in fact make the actors more predictable as well.

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[1] Glenn E. Robinson, *Global Jihad: A Brief History* (Stanford, CA: Stanford University Press, 2021), 139.

Researchers often study lone wolf terrorism in the context of the phenomenon writ large, placing equal emphasis on lone wolves of all ideologies. This approach creates certain gaps within the existing literature, and it is this theme of examining lone wolf terrorism so broadly that this study addresses. While it is true that one may find similarities across all classifications of terrorists, it is equally true that it is more effective to compare like ideologies. While apples and oranges are both fruit, we are better rewarded by comparing apples to other apples. Therefore, this study narrows the aperture of analysis to only those lone wolves who identify as jihadists.

In existing literature there is often disagreement on the definition of what constitutes a lone wolf terrorist attack. For example Jeffrey Simon organizes case studies within what he believes are the five categories of lone wolf terrorists: secular, religious, single-issue, idiosyncratic, and criminal, comparing them all equally (despite most mainstream scholars disagreeing with the 'criminal terrorist' characterization).[2] Ramon Spaaij likewise regards a lone wolf as anyone "who acts out of a strong political, ideological, or religious conviction, carefully plans his or her actions, and may successfully hide his or her operations from those around them."[3] Both collate and compare lone wolves of all ideologies looking for similarities, thus comparing apples to oranges (and pears, etc.). For this thesis we define the Islamist lone wolf as an individual, without formal connection to a terrorist organization, who perpetrates violence under the guise of Islam in an ostensible attempt to connect to the greater global jihad movement. It is by using this narrow categorization that we identify factors which may assist in the preemptive identification of those with a propensity to become agents of stochastic terror. We are, in effect, identifying rotten apples within the orchard.

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[2] Jeffrey D. Simon, *Lone Wolf Terrorism: Understanding the Growing Threat* (Amherst, New York: Prometheus Books, 2016), 43–46.

[3] Ramón Spaaij, *Understanding Lone Wolf Terrorism: Global Patterns, Motivations and Prevention*, SpringerBriefs in Criminology (New York: Springer, 2012), 17.

II. WHO ARE THE LONE WOLVES?

Although it is difficult and perhaps impossible to develop a profile for all lone wolf jihadists, based on our research, it is possible to identify indicators of their likely radicalization. An accepted model for identifying commonalities amongst all lone wolf terrorists both pre- and post-9/11 (through 2017) can be seen in Table 1.[4] This representation is rather broad and represents lone wolf terrorism writ large, though it holds relatively true for the jihadist subset.

Table 1.   Commonalities amongst All Lone Wolves[5]

Variable	% of Pre-9/11 Cases	% of Post 9/11 Cases
Personal/political grievances	80	80
Affinity with extremist group	63	48
Enabler	57	70
Broadcasting intent	84	70
Triggering event	84	73

To develop a more useful model we examined four case studies of lone wolf jihadist attacks and inspired stochastic violence to codify key indicators of the radicalization process. Each case was selected for evaluation based on the seemingly disparate nature of attack and attacker. The case studies selected for analysis are as follows

A.   ORLANDO

Around 2:00 am on June 12, 2016, Omar Mateen murdered 49 people and injured 53 more inside the Pulse nightclub in Orlando, Florida. Mateen was not particularly religious—at least not for most of his life—but as a violent, maladjusted outsider, he did identify with and have an affinity for radical Islamist groups from a young age. It was no coincidence Mateen chose to attack a gay night club. He was an angry, sexually confused,

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[4] Mark S. Hamm and R. F. J. Spaaij, *The Age of Lone Wolf Terrorism*, *Studies in Transgression* (New York: Columbia University Press, 2017), 151.

[5] Hamm and Spaaij, *The Age of Lone Wolf Terrorism,* 151.

disillusioned young man, looking to make sense of his life. Stochastic terrorism may only require a confused individual looking to connect personal acts of violence to the "wiki-narrative" of global jihad. In many ways, the massacre at the Pulse nightclub was twenty-first century jihad, precisely as al-Suri prescribed.

B. FORT HOOD

On the afternoon of November 5, 2009, MAJ Nidal Hasan, an officer and psychiatrist in the U.S. Army, walked into the Soldier Readiness Processing (SRP) Center at Ft. Hood, Texas. Shortly after 1 p.m. Hasan shouted "Allahu Akbar," and opened fire. MAJ Hasan's intent was to kill as many American Soldiers as possible before sacrificing his own life as (what he considered) a martyr. Before he was severely wounded by responding law enforcement officers, Hasan had killed 13 and wounded 32. Hasan survived the attack, was tried, convicted of premeditated murder, and sentenced to death. Subsequently, much has been made of Nidal Hasan's connection to radical ideologue Anwar al-Awlaki, but contrary to widely held belief, Nidal Hasan had already self-radicalized prior to reaching out by email (with little success) to Awlaki in 2008–2009.[6]

C. NICE

On the evening of July 14, 2016, Mohamed Lahouaiej-Bouhlel, a recently radicalized French citizen of Tunisian origin, drove a 19-ton cargo truck into a crowd of revelers who were celebrating Bastille Day in Nice, France. The ensuing carnage resulted in 86 deaths and 458 injuries. The Nice attack was a terrifying example of low-tech jihad executed with devastating effect. During the attack Bouhlel was shot dead by police and, although ISIS claimed responsibility for inspiring the attack, there is yet to be any evidence directly linking him to the organization. However, his self-radicalization and affinity for extremist organizations remains clear and undeniable.

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[6] Much has been made of Hasan's connection to Awlaki, but Hasan was clearly radicalized before reaching out to him in Yemen. Their relationship is further examined in section V-B.

D.   SAN BERNARDINO

On the morning of December 2, 2015, Syed Rizwan Farook and Tashfeen Malik dropped their six-month-old child off at their parents' house and proceeded to commit what was at the time the worst terror attack in the U.S. since September 11, 2001. At the end of their rampage, fourteen were dead and twenty-two lay wounded. After an hours-long chase by law enforcement and final shootout, both were killed by police.

Each individual examined generally conformed to the above model (Table 1). However, the model itself proves difficult for predictive analysis and is rather elementary. A more accurate predictive model should identify social, societal, and environmental factors which seem to indicate a propensity for radicalization and lone wolf type behavior. The analysis of these specific (and recent) lone wolf attacks identified certain commonalities. While some common traits are clearly anecdotal or problematic for our purposes from a civil liberties perspective (ex. travel to Saudi Arabia, or exercising Second Amendment rights), most indeed proved useful for development of a more refined model. Specifically, we propose seven characteristics or behaviors with which most lone wolf jihadists will likely conform, shown in Table 2.

Table 2.   Commonalities amongst Islamic Lone Wolves

Variable	% present within case studies
Engrossment in radical messaging/propaganda on the internet	100
First or second-generation immigrant	100
Reduction of personal effects/finances	100
Affinity with extremist group(s)	100
Rapid shift in beliefs or Mosque attendance	75
Withdrawal from, or absence of family/friends/ romantic relationships	75
Sexuality (repression or guilt)	75

There is sufficient evidence to suggest these seven distinct characteristics will typify the preponderance of lone wolf jihadists. This is not to say that everyone who displays these indicators will radicalize to the point of violence, but that most who

radicalize to violence will display a combination of these indicators. We therefore begin to gain an impression of the commonalities between attackers as well as how seemingly unrelated environmental factors contribute. But to understand the Islamist lone wolf, we must first examine the evolution of Islamist terrorism from an organizationally based model to system-based model relying on networks and narratives for survival.

III.   21ST CENTURY JIHAD

A.   INTRODUCTION

David C. Rapoport contends that terrorist activity has occurred in four distinct waves.[7] According to Rapoport, the first wave was comprised of the anarchist movement of the late nineteenth and early twentieth centuries, followed by the Anti-Colonial Wave of the 1920s, which was then eclipsed by the New Left Wave of the 1960s. The fourth wave, in which the world still finds itself, is the Religious Wave. It should be of little surprise to suggest that the most influential and problematic faction within the Religious Wave has been the global jihadist movement.

Glenn Robinson suggests that the global jihad movement had in itself four distinct waves. Beginning in 1979 with the Soviet invasion of Afghanistan, the first wave lasted until roughly 1990. The second wave, whose main ideologue was Usama Bin Laden (UBL), focused on attacking America in a "far enemy" strategy designed to erode American support for "apostate regimes" throughout the Middle East and North Africa. Subsequently the third wave was characterized by the emergence of ISIS and that organization's territorial expansion. Finally, and of most interest to this study is the fourth wave, or the "Personal Jihad" wave. According to Robinson, this fourth wave of global jihad is best encapsulated by (and largely a product of) the teachings of radical Islamic ideologue Mustafa Bin Abd al-Qadir Setmarium Nasar, better known by his nom de guerre—Abu Musab al-Suri.[8] It is in this "Fourth Wave of the Fourth Wave" in which we currently find ourselves, where radical ideology is now dangerously enhanced by information technology.

Although most would consider advances in global communications a net positive, violent extremist organizations (VEOs), including global jihadists, have manipulated these

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[7] David C. Rapoport, "The Four Waves of Modern Terrorism," in *Attacking Terrorism: Elements of a Grand Strategy*, ed. A.K. Cronin and J.M. Lodes (Washington, D.C.: Georgetown University Press, 2004), 46–73.

[8] Glenn E. Robinson, "The Four Waves of Global Jihad, 1979–2017," *Middle East Policy* XXIV, no. No. 3 (Fall 2017): 70–88.

technologies to their own ends. During the last two decades, the teachings of Abu Musab al-Suri combined serendipitously with increased global internet access to enable a dangerous intersection of medieval ideology and information age technology. ISIS capitalized on these technological advances to realize Suri's ambitions. Jihadist ideologues such as Abu Musab al-Zarqawi, Abu Bakr al-Baghdadi, and the individual behind the nom de plume Abu Bakr Naji are most often credited with the rise of ISIS, but it was the model set forth by Suri, made real through a new form of cyber warfare that most contributed to the organization's meteoric rise, catastrophic fall, and enduring legacy.

B.   THE ARCHITECT

American-born cleric Anwar al-Awlaki has been credited as the Bin Laden of the internet and continues to be the most important ideologue to the English-speaking world. Seminal in the popularization of stochastic terror, Awlaki was, as Abdel Atwan writes, "the first to suggest exploiting social networking platforms to spread jihadist material."[9] However, it was the musings of a different radical thinker who has most strategically influenced terrorism in the information age. In 2004, a new kind of jihad was introduced within extremist circles by the Syrian al-Qaeda strategist, Abu Musab al-Suri. Later in that year, Suri published a 1,600-page manifesto, *The Global Islamic Resistance Call*, which has since served as inspiration for a new generation of technology-obsessed jihadists. The manifesto was also, uncoincidentally, primarily distributed online, and has subsequently become the de-facto "how to" manual for global jihad in the information age.

In his call to arms, Suri proposed a bifurcated strategy for the future of holy war. Generally speaking, the two branches of this vision consisted of an individual jihad, or *jihad fardi*, which would redefine global terrorism, and a collective "open front jihad," which would provide physical room for a caliphate to be established (when the right conditions were met). The internet, and the advent of social media specifically, would prove critical to both. As Brynjar Lia describes in his biography of al-Suri aptly titled *Architect of Global Jihad,* "Al-Suri's ability to present operational doctrines is appreciated

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[9] Abdel Bari Atwan, *Islamic State: The Digital Caliphate* (Oakland, California: University of California Press, 2015), 17.

(by jihadists), as are his writings about 'individual terrorism' by loners or self-sustained independent cells.…[Suri is a] non-conventional writer whose perspectives represent a fresh approach to jihadi warfare."[10] As we will see, Suri's concepts proved unconventional, innovative, and quite transformative for jihadist warfare. In fact, I would argue that this methodology, specifically as it pertains to individual responsibilities, represents the new face of global jihad and likely the most significant (or at least most probable) terroristic threat for the future.

Abu Musab al-Suri was born Mustafa bin Abd al-Qadir Setmariam Nassar in Aleppo, Syria, in 1958. He is unique amongst jihadi ideologues due both to his vision and capacity to be critical of strategic and tactical errors within the movement. Lia accurately describes al-Suri as "a dissident, a critic, and an intellectual in an ideological current in which one would expect to find obedience rather than dissent, conformity rather than self-criticism."[11] Make no mistake, Suri was no apologist; he was a devout true-believer and cold-blooded killer, but he was also pragmatic, intelligent, contemplative, and an exceptionally prolific writer. It is precisely these characteristics which also make him so fascinating.

It may be erroneous to characterize al-Suri as a true al-Qaeda member — he was very much a free agent, and no great friend of UBL. After swearing allegiance, or *bay'a,* to Taliban leader Mullah Muhammad Omar, Suri was quite censorious of the 9/11 attacks on America. He rightly predicted the United States' reaction would spell doom for the Taliban's Islamic Emirate of Afghanistan, and to a large extent al-Qaeda central. Suri was equally critical of Bin Laden's proclivity to ignore the directives of Mullah Omar.[12] Suri, unlike Bin Laden, understood that the United States' military and intelligence apparatus would likely dismantle the cellular network of al-Qaeda in relatively short measure and wreak absolute havoc upon the Taliban's conventional military capabilities. With

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[10] Brynjar Lia, *Architect of Global Jihad: The Life of Al-Qaida Strategist Abu Mus'ab al-Suri* (Oxford University Press, 2014), 11.

[11] Lia, *Architect of Global Jihad: The Life of Al-Qaida Strategist Abu Mus'ab al-Suri*, 3.

[12] UBL had also pledged *bay'a* to Omar.

seemingly little ego (unlike UBL), Suri focused on realistic expectations, and a strategic outlook which could best affect the world as it was, not as he wished it to be.

Suri was also well-travelled. Following his early life in Syria, he lived in Spain (where he acquired citizenship and a Spanish bride), Afghanistan, Pakistan, and the United Kingdom, where he resided in London for three years. Although he was present for the Soviet-Afghan war and has been linked to the 2004 Madrid train bombings, Suri's seminal contribution to the global jihad effort was not as a fighter or commander—it was as an intellectual. In fact, Abu Musab al-Suri may well be regarded as the most influential jihadi strategist of the last fifty years. Recognized as such by the United States, Suri had a $5 million bounty on his head by 2005.[13] On October 31, 2005, Pakistani intelligence officers, with support from the U.S., conducted a raid on the al-Madina Utilities Store in the Goualmandi district of Quetta, Pakistan. After a short but brisk gun fight which left at least one dead, Abu Musab al-Suri was finally detained by Pakistani authorities.

C.   SURI'S METHODOLOGY

Despite his capture in Pakistan in 2005, Suri continues to be widely recognized as the architect of a global form of jihad reliant on information technology to achieve the desired effects.[14] Although Awlaki has been more accessible to the English-speaking world, and as we shall see, strikingly influential to Islamist lone wolves, it is likely that Awlaki himself drew inspiration from Suri. Suri remains a visionary for global jihad across all languages, but certainly principal amongst Arabic speakers. His vision took on new meaning as adherents, explicitly the Islamic State, attempted to realize his unique imagining of a global jihad coordinated across the World Wide Web.

Perhaps Suri's most enduring contribution was his call for a restructuring of the organizational model most prevalent amongst jihadist groups. Seeing the vulnerabilities inherent in a cellular but hierarchical network, Suri prescribed something altogether new. Suri's model, which he termed "*nizam, la tanzim,*" or "system, not organization,"

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[13] Lia, *Architect of Global Jihad: The Life of Al-Qaida Strategist Abu Mus'ab al-Suri,* 1.

[14] Lia, *Architect of Global Jihad: The Life of Al-Qaida Strategist Abu Mus'ab al-Suri*, 5–7.

eschewed any form of line-and-block organizational chart in favor of a diffuse and decentralized global movement linked only by ideology, shared aims, and narrative. The central tenet of this system was the ability to inspire adherents to pursue personal or individual acts of violence (*jihad fardi*).

To Suri, individual jihad was a new take on an old idea — self-radicalized sleeper cells. Although sleeper cells were hardly a revolutionary idea within jihadist circles, Suri added a new twist: his sleepers would be decentralized and leaderless, linked only by ideology, and in many cases, the internet. This self-radicalized form of terror was unique because it required little support from the parent organization other than inspiration, which could easily be provided both online and through the media at large. More importantly, it provided a very effective way to infiltrate jihadis into the West — it would simply enlist those who were already there, with no need to support them logistically.

Although their radicalization would be covert and clandestine, their attacks would be overt and spectacular, as was the case in the 2016 Orlando nightclub shooting in which a self-radicalized American citizen left 49 dead and another 53 wounded after pledging allegiance to ISIS.[15] What Suri proposed was what the media would eventually popularize as the lone wolf attack. By following Suri's blueprint of jihad, major militant groups such as al-Qaeda and ISIS became much like corporate headquarters, willing to export their brand to any group or individual enterprising enough to open a local franchise. This symbiotic relationship proved beneficial to all parties. For the parent organizations it provided desired publicity; for the aspiring franchisees it provided what they sought most: a semblance of legitimacy and fame. In the subsequent chapters we will examine in-depth how this model has violently played out across the world stage, enabled by information technologies.

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[15] P. W. Singer and Emerson T. Brooking, *Likewar: The Weaponization of Social Media* (Boston: Houghton Mifflin Harcourt, an Eamon Dolan Book, 2018), 153.

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IV. INFORMATION TECHNOLOGY'S CONTRIBUTION TO LONE WOLF JIHADISM

The very nature of a lone wolf makes it difficult to preemptively identify personality or lifestyle risk factors, as they are often isolated from society. But lone wolves have much more exposure to society in cyberspace than they do in real life. Unlike their personal lives where they are often isolated for some social or personality driven reason, online they can find throngs of like-minded individuals with similar mental and situational outlooks. These loners make up for their lack of real-life social contact by spending exorbitant amounts of time cyber chatting, watching online videos, and reading propaganda, all at a rate and volume not possible in the material world. Often, they have a large social network: a giant echo chamber of the people they cannot find in real life. The people whose views are not socially acceptable gather online to hype each other up and confirm their own biases. As Antinori states, the online "ego-system" is creating the world's first global criminal phenomenon.[16]

Specifically, since the advent of ISIS, cyberspace and lone wolves are inseparable, with the new face of individual jihad requiring the internet to prosecute its global campaign. As stated earlier, even disparate attacks share commonalities, and that is certainly true for the attacker's cyber footprint.

The ability of social media, and the greater online environment, to put visually compelling narratives of jihadi propaganda at the fingertips of unlimited recruits represents a manifestation of Suri's teachings. Today's youth can be easily influenced online by peers, mentors, self-described authority figures, or just random strangers "promoting the appealing, persuasive and seductive power" of *jihad fardi*.[17] The younger generations seem more susceptible to online influence for numerous reasons. They simply spend a

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[16] Arije Antinori, "The 'Jihadi Wolf' Threat: The Evolution of Terror Narratives Between the Cyber-Social Ecosystem and Self-Radicalization 'Ego-System,'," in *1st European Counter Terrorism Centre (ECTC)* November 4, 2007.

[17] Antinori, "The 'Jihadi Wolf' Threat: The Evolution of Terror Narratives Between the Cyber-Social Ecosystem and Self-Radicalization 'Ego-System,'."
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larger amount of time online, so just as advertisers have shifted focus away from radio and newspapers towards clickbait ads, so too have extremists sought prospective consumers online. Technology itself has advanced to the point that extremists can create high quality propaganda very quickly to capitalize on real world events in real time, making their message more topical and relatable to online consumers.

The ubiquity of social media and cyber coverage led Antinori to argue that we can't look at cyber as a separate piece of the lone jihad; it is so intertwined and critical that without it, this stage of global jihad would not even be possible.[18] This new evolution of internet jihadism also seems to break down the differences between groups like AQ and ISIS in favor of a more jihadist cultural state of mind.[19] In other words, today's youth do not need to strictly believe in or adhere to a specific version of the ideology, they just need to want to belong to a group. Glenn Robinson refers to this as a "bumper-sticker version" of the ideology.[20] Recruits do not need a deep understanding of true Islam; they just need enthusiasm and some grievances sparked by misleading stories purporting to be from the Koran. This is aggravated by the adeptness of online propagandizers in portraying individual jihadism in sleek, sexy, online short clips. It is safe to say jihadi propagandists are maximizing technology and an understanding of how today's youth consume information to target the most vulnerable in the population and indoctrinate them from thousands of miles away to fight in the name of global jihad.

Antinori breaks online radicalization into two branches: the cyber ecosystem and the cyber ego-system. The ecosystem branch is characterized by "social radicalization across social media platforms," while the ego-system is "mobile radicalization" in terms of cyber-social isolation and self-radicalization.[21] The ecosystem is easier for law

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[18] Antinori, "The 'Jihadi Wolf' Threat: The Evolution of Terror Narratives Between the Cyber-Social Ecosystem and Self-Radicalization 'Ego-System.'"

[19] Antinori, "The 'Jihadi Wolf' Threat: The Evolution of Terror Narratives Between the Cyber-Social Ecosystem and Self-Radicalization 'Ego-System.'"

[20] Glenn E. Robinson, "Hamas as Social Movement," in *Islamic Activism: A Social Movement Theory Approach,* (Bloomington, IN: Indiana University Press, 2004), 116.

[21] Antinori, "The 'Jihadi Wolf' Threat: The Evolution of Terror Narratives Between the Cyber-Social Ecosystem and Self-Radicalization 'Ego-System.'"

enforcement to track, as they are usually open membership YouTube or Telegram channels, or ISIS personalities openly broadcasting on Twitter and Facebook. Law enforcement can join these groups and watch for indicators. The ego-system on the other hand, is more difficult to identify. It may be a true loner, just hopping from one belief to the next looking for belonging. It may be someone trying to find the intellectual and moral spark to push them over the edge.

According to Winter, ISIS has outsourced both production and dissemination of its content. They unofficially enlist tech savvy influencers to peddle online propaganda with minimal effort from ISIS HQ.[22] This further exacerbates the lone wolf problem, as any influencer can put their specific spin on ISIS media to their legion of fans, who by nature are already predisposed to believing and following anything emanating from their influencer of choice. It also makes the content very personal. Rather than coming from a place thousands of miles away in a foreign language, its coming from the same person or network from which they receive amusing pop culture memes.

To further support this point, Fisher sites a blurring of the delineation between content producers and disseminators, resulting in a "user-curated Swarmcast." He identifies three key components of the Swarmcast: speed, agility, and resilience.[23] All three of these traits make it more difficult for law enforcement to target and identify lone wolves and their recruiters. Fisher also identifies how ISIS uses a complex network of accounts on social media to ensure survivability. Even if a few accounts are stopped by law enforcement, there are plenty of backups which would already be in their follower's networks, continuing the online radicalization without missing a beat.[24] This dispersion in network intrusion is critical to reaching lone wolves, as they may not initially be following a "mainstream" network but may have their curiosity piqued by some tangential post on an unrelated network.

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[22] Charlie Winter, "The Virtual 'Caliphate': Understanding Islamic State's Propaganda Strategy," STRATCOM COE, accessed February 16, 2020, https://www.stratcomcoe.org/charlie-winter-virtual-caliphate-understanding-islamic-states-propaganda-strategy.

[23] Ali Fisher, "How Jihadist Networks Maintain a Persistent Online Presence," *Perspectives on Terrorism* 9, no. 3 (June 19, 2015): 4, http://www.terrorismanalysts.com/pt/index.php/pot/article/view/426.

[24] Fisher, "How Jihadist Networks Maintain a Persistent Online Presence," 4.

Winter also believes social media is today's "radical mosque." While social media is rarely the actual reason someone becomes radicalized, it is generally the biggest catalyst in their radicalization.[25] Meaning that while people certainly get their blood boiling on Twitter and Facebook, lone wolves don't radicalize simply because of this action. The actual reason is often complex and personal. However, once the radicalization process has begun, social media assumes an outsized role.

But it is not just open source mass social media like Twitter and YouTube that contribute to the phenomenon. Encrypted messaging apps like Telegram are increasingly becoming part of the toolset. Shehabat, Mitew, and Alzoubi show that much like in broader social media, ISIS powers down and distributes their messaging power to anyone friendly to the cause. This allows hundreds or thousands of users to create their own encrypted messaging channels to create and share ISIS propaganda. Since it is easier to evade law enforcement on these apps, they become one stop shops for recruiting, radicalizing, directing, and in general ISIS hyping.[26] The authors contend that encrypted apps are specifically correlated to the rise in Islamist lone wolf attacks in the West. ISIS Telegram channels are littered with instructions on how to be a lone wolf, and critically, how to leave a pledge to ISIS when you commit the act.[27] That is a critical component of Suri's prescription—loosely connected self-radicalized cells conducting attacks in the name of the movement.

The United Cyber Caliphate Telegram channel may be the best example of ISIS's desire to inspire lone wolves online. They have posted alleged addresses of U.S. service members, motivational propaganda, and very slick photos urging lone wolf action against

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[25] Winter, "The Virtual 'Caliphate': Understanding Islamic State's Propaganda Strategy.".

[26] Ahmad Shehabat, Teodor Mitew, and Yahia Alzoubi, "Encrypted Jihad: Investigating the Role of Telegram App in Lone Wolf Attacks in the West," *Journal of Strategic Security* 10, no. 3 (October 1, 2017), https://doi.org/10.5038/1944-0472.10.3.1604.

[27] Shehabat, Mitew, and Alzoubi, "Encrypted Jihad: Investigating the Role of Telegram App in Lone Wolf Attacks in the West.".

Westerns.[28] Especially as the physical caliphate is destroyed, the importance of the cyber-caliphate and its message increases.

Given the saturation of the 24-hour news cycle, Antinori believes the news media can become not only a means but also an ends unto themselves.[29] The act itself may have had a low effect, but by perpetually sensationalizing the act, the terror effect is magnified beyond what the lone wolf could have ever achieved himself. Likewise, Silva and Capellan assert that lone wolf attacks get a disproportionately higher news coverage than similar mass shooting style attacks. This inundation of information over a singular, sometimes small-scale incident, not only increases the public's perception of the risk of lone wolves, but also increases the perceived reward for a lone wolf to act. We have seen time and again lone wolves post manifestos or just farewell social media posts prior to their attack; they feed off the attention they know they will get for the act. They will become immortalized as martyrs for the cause, receiving the attention they never received in life. To make matters worse, the non-stop news coverage of these events tends to vilify not just the offender (which is reasonable), but also the type of person the offender was.[30] In the case of Islamist lone wolves, these would generally be young Arab men in Western countries. This increased vilification of an entire subset of the population is an amazing grievance for terrorist recruiters to exploit. Given the lone wolf's tendency to "externalize blame," what better recruiting tool than to say, "the reason your life isn't fulfilled is because of the non-believers persecuting you."[31]

In 2012, the Swedish Defense Research Agency (SDRA) noted that lone wolves leave a digital fingerprint, but that at the time natural language processing, machine learning, and artificial intelligence were not advanced enough to scour the reaches of the

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[28] Shehabat, Mitew, and Alzoubi, "Encrypted Jihad: Investigating the Role of Telegram App in Lone Wolf Attacks in the West.".

[29] Arije Antinori, "From the Islamic State to the 'Islamic State Of Mind': The Evolution of the 'Jihadisphere' and the Rise of the Lone Jihad," *European Law Enforcement Research Bulletin*, no. 16 (August 14, 2017): 47–55.

[30] James Alan Fox and Monica J. DeLateur, "Mass Shootings in America: Moving Beyond Newtown," *Homicide Studies* 18, no. 1 (February 1, 2014): 125–45, https://doi.org/10.1177/1088767913510297.

[31] Fox and DeLateur, "Mass Shootings in America: Moving Beyond Newtown.".

internet and help law enforcement.[32] As of 2020, we are getting closer to this ability. The SDRA also correctly notes that it is rather difficult to differentiate between lone wolves and random people on the internet with extreme views.[33] While it very easy in hindsight to identify all potential indicators of extremist online activity, catching these indicators prior to the act is generally a stroke of luck at best, or impossible at worst. The lone wolves tend to follow the same steps and post similar content, but given the expanse of the internet, this is generally not feasible to catch. But if law enforcement started with a list of potential lone wolves, based on the earlier discussed traits and indicators, then it could thin the search to focus on potential suspects.

Applying today's techniques in text mining, affect analysis, natural language processing, and machine learning to various extremist messaging apps and online forums could greatly assist law enforcement (LE) in thinning the herd of potential lone wolves, and focusing limited assets. The SDRA suggests such an approach for lone wolves and extremists generally, but this approach requires refinement and specialization to be effective.[34] Given the difference in terminology and techniques for Islamist lone wolves versus lone wolves in general, law enforcement would need to properly classify training data specific to Islamists, and then likely employ a supervised learning technique. This will initially be fairly resource intensive. However, assuming a static jihadist approach to recruiting and propaganda, LE could deploy this new tool across the wide range of modalities used by the jihadist recruiter. In other words, once the tool is developed, LE could use it relatively uniformly on Telegram, Facebook, YouTube, and any number of online forums catering to the jihadists.

The importance of social media and the greater online jihadi community in inspiring lone wolf attacks cannot be overstated. As Weimann shows, most recent lone

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[32] Joel Brynielsson et al., "Analysis of Weak Signals for Detecting Lone Wolf Terrorists," in *2012 European Intelligence and Security Informatics Conference* (2012 European Intelligence and Security Informatics Conference (EISIC), Odense, Denmark: IEEE, 2012), 197–204, https://doi.org/10.1109/EISIC.2012.20.

[33] Brynielsson et al., "Analysis of Weak Signals for Detecting Lone Wolf Terrorists.".

[34] Brynielsson et al., "Analysis of Weak Signals for Detecting Lone Wolf Terrorists.".

wolf attacks have relied on social media for everything from radicalization and how-to instructions, to praise and post attack propaganda.[35]

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[35] Gabriel Weimann, "Lone Wolves in Cyberspace," *Journal of Terrorism Research* 3, no. 2 (September 22, 2012), https://doi.org/10.15664/jtr.405.

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V.   THE CASE STUDIES

To connect the dots between these cases, our methodology is to examine each within the context of four categories or bands. These bands will provide both continuity between cases as well as a unique method to identify key similarities between attackers. The four categories of analysis are: early life and education, family and social connections, path traveled to radicalization, and tipping point. This is followed by a discussion of the warning signs exhibited preceding the attacks as well as those identified subsequently. As with the homicidal triad, the authors of this thesis propose that by codifying warning signs we will offer an increased opportunity to preemptively identify those with an inclination towards self-radicalization.

A.   THE PULSE MASSACRE, TERROR OR HATE: AN IN-DEPTH ANALYSIS OF OMAR MATEEN

1.   Early Life and Education

By most accounts, Omar Mateen was a bad kid. He was suspended from school numerous times, and records of his poor behavior go back to at least the third grade. He was disruptive in class, combative, forced to switch schools due to behavioral issues, and eventually dropped out. In interviews after the massacre, former classmates described him as a "jerk" and said that he "got on everybody's nerves." Shortly after September 11, 2001, Mateen was suspended for allegedly celebrating the attacks.[36] At the time though, much of his radical rhetoric was viewed merely as a play for attention and ignored by school administrators, likely for fear of appearing Islamophobic.

School records show Mateen was a below average student with distracting behavioral issues.[37] One school administrator claimed Mateen's father would never take the claims seriously and always sided with Omar.[38] He displayed a propensity to use

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[36] "Records: Orlando Gunman Talked about Violence in 3rd Grade," *Seattle Times*, June 17, 2016, https://www.seattletimes.com/nation-world/apnewsbreak-woman-says-nightclub-shooter-stalked-her/.

[37] Gary Detman, "Omar Mateen Had Behavioral Issues in School, Records Show," WPEC CBS, June 16, 2016, https://cbs12.com/news/local/omar-mateen-had-behavioral-issues-in-school-records-show.

[38] *Seattle Times*, "Records: Orlando Gunman Talked about Violence in 3rd Grade."

shocking tactics to garner attention and often invoked extremist organizations—he was once reprimanded for imitating a burning plane after 9/11. Yet law enforcement took little interest.

2.   Family and Social Connections

Mateen's poor behavior seems to have continued into his adult life. He married his first wife in 2009, only to separate after four months due to his physical abusiveness. Shortly thereafter he married again, and yet again was alleged to have abused his wife. During his second marriage, he also allegedly stalked a local female bartender.[39]

Aside from the woes of his personal life, Mateen also had issues in his professional life. He attempted to become a law enforcement officer in Florida, only to be dismissed from training for remarks about bringing a weapon to work after the Virginia Tech shootings in 2007. He later found work with a private security company, G4S, where he dubiously passed a personality test falsely signed by a physician who did not work for the company. G4S later admitted the test was blessed off by a physician with close ties to the Mateen family.[40] He was removed from his first posting with G4S after he claimed he would "have al-Qaeda kill" a fellow security guard. Mateen claimed he said this in retaliation for coworkers' racist remarks. There exists no evidence indicating any actual relationship between Mateen and AQ, but as in imitating a burning plane after 9/11, he clearly displayed an affinity for jihadist groups—even if just for shock value.

Mateen's father left Afghanistan in the 1980s and Omar was born in the U.S. Like many lone wolves, Omar was a first-generation immigrant. Mateen's father hosted a satellite political TV show where he often criticized the Pakistani and Afghan governments.[41] His actual political stance is described by Picart as "incoherent," but he had allegedly "disavowed Jihadi affiliation." Friends reported that the "Mateen children

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[39] Caroline Joan (Kay) Picart, *American Self-Radicalizing Terrorists and the Allure of "Jihadi Cool/ Chic"* (Cambridge Scholars Publishing, 2017), 144.

[40] *Seattle Times*, "Records: Orlando Gunman Talked about Violence in 3rd Grade."

[41] "No Mistrial after Reveal That Pulse Gunman's Father Was FBI Informant," NBC News, accessed May 28, 2020, https://www.nbcnews.com/news/us-news/pulse-gunman-s-father-was-secret-fbi-informant-court-filing-n860116.

feared any link to Islamic extremism."[42]   This would manifest when Mateen's father allegedly slapped Omar for making comments that seemed to support the 9/11 attacks.

3.   Path to Radicalization

Given the comparative ambiguity and confliction regarding Mateen's motives, his case study provides a unique insight into how Americans ascribe motivations based on political leanings. As Noor et al., found, groups with different beliefs were more likely to try to ascribe Mateen's motives to something which fit their narrative.[43] National security hawks believed he was a terrorist, social justice activists were more apt to claim he was anti-LGBTQ, while others blamed mental illness. Mateen seems to have been a self-loathing, anti-social, repressed homosexual, with an affinity to falling back on extremist organizations to create fear and shock value. He certainly suffered from some level of mental illness, yet he was just as likely acting out on his repressed sexual identity by attacking the LGBTQ community. And what better way to seek legitimacy (and headlines) than pledging allegiance to ISIS in the process, though adequate evidence exists to show a genuine modicum of radicalization and a growing level of fundamentalist beliefs.

He was placed on the FBI's terrorist watchlist when he was investigated regarding comments made to coworkers during his brief stint as a security guard.[44] He repeatedly boasted about connections to al-Nusra, al-Qaeda, Hamas, Hezbollah, and ISIS (despite these groups divergent ideologies). He also became engrossed in the online sermons of Anwar al-Awlaki. His second wife would later claim in court that he was an avid reader of online extremist sites.[45] Mateen was again investigated by the FBI, this time regarding his

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[42] Picart, *American Self-Radicalizing Terrorists and the Allure of "Jihadi Cool/Chic,"* 151.

[43] Masi Noor et al., "'Terrorist' or 'Mentally Ill': Motivated Biases Rooted in Partisanship Shape Attributions About Violent Actors," *Social Psychological and Personality Science* 10, no. 4 (May 1, 2019): 485–93, https://doi.org/10.1177/1948550618764808.

[44] Mark Mazzetti, Eric Lichtblau, and Alan Blinder, "Omar Mateen, Twice Scrutinized by F.B.I., Shows Threat of Lone Terrorists," *New York Times*, June 13, 2016, https://www.nytimes.com/2016/06/14/us/politics/orlando-shooting-omar-mateen.html.

[45] Benjamin Pepich, "Understanding Al-Qaeda and Isis Utilization of Individual Jihadists to Attack the West and Establish a Global Caliphate," *ProQuest Dissertations and Theses* (D.S.S., United States -- South Dakota, National American University, 2018), 99–101, http://search.proquest.com/docview/2218585700/abstract/2E0A70CFC885432EPQ/2.

connection with a member of his mosque who travelled to Syria to carry out a suicide attack for al-Nusra.[46] Weeks before his own attack Omar attempted to buy body armor and bulk ammo, but was turned away by the shop owners, who alerted the FBI.[47] In aggregate, these events paint an obvious picture, yet the dots were never connected in a meaningful way.

4. Tipping Point

A true tipping point in Mateen's life is not immediately clear—though he claimed it was the death of ISIS commander Abu Wahib by a U.S. airstrike in Iraq. He was fired as a corrections officer trainee, but he quickly took another job in private security. His first marriage ended after a few months, but he quickly remarried. Following the attack at Pulse, numerous survivors claimed to have seen Mateen in the club multiple times in the weeks and months leading up to the attack, and this may have been reconnaissance, sexual exploration, or both. He was known to have used gay dating apps, yet no evidence exists of him having consummated any homosexual relationships, although this is not outside the realm of possibility. While it is possible, as noted, these actions were indicative of stalking prey in preparation, it is as likely they indicate a man attempting to come to grips with his own sexuality—yet unable to reconcile this reality with his belief system.

During the shooting, Mateen called 911 multiple times. In these calls he pledged allegiance to ISIS and referred to himself as "mujahideen (sic)"[48] and "soldier of god." He spoke to a crisis negotiator and told him to "tell America to stop bombing Syria and Iraq," and that "too many innocent people were dying because of U.S. strikes." He claimed his motivation for the attack was to "stop the U.S. air strikes." Specifically, he claimed the

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[46] Thomas R. Mockaitis, *Violent Extremists: Understanding the Domestic and International Terrorist Threat* (ABC-CLIO, 2019), 101.

[47] Gary Detman, "Store Alerted FBI When Omar Mateen Tried to Buy Body Armor, Ammo in Bulk," WPEC CBS, June 16, 2016, https://cbs12.com/news/local/omar-mateen-tried-to-buy-level-3-body-armor-at-jensen-beach-store.

[48] Mateen here makes a mischaracterization, as *Mujahideen* is a plural noun and thus does not refer to a single individual.

May 6, 2016 strike on ISIS commander Abu Wahib was the impetus for his actions. He cited the Boston Marathon bombers and the Paris, France attackers as well.[49]

Mateen's true tipping point, it appears, was his inability to reconcile his sexual identity with his growing religiosity. In a seemingly odd, yet alarmingly common paradox, it is also quite likely that his increased religiosity was directly related to his inability to accept his sexual identity.

B.   THE INFILTRATION OF FORT HOOD: AN IN-DEPTH ANALYSIS OF MAJ NIDAL HASAN

1.   Early Life and Education

Nidal Malik Hasan was born into a Palestinian immigrant family in Arlington County, Virginia on September 8, 1970. The Hasan family made all attempts to assimilate into American society being relatively secularized and "more 'culturally' Muslim than actively engaged in the religion."[50] Nidal's parents ran a few small businesses in Northern Virginia. His childhood was one of relative security and comfort. While in high school little distinguished Hasan from any other students. In fact, as Katherine Poppe asserts "[Hasan was] an unremarkable student who left few impressions on those around him."[51] There is no evidence that young Nidal was subjected to discrimination or school yard bullying due to his ethnicity or religion. Indeed, there is no evidence that Nidal Hasan's radicalization began at an early age. If anything stands out regarding this period of Hasan's life, it is his introversion marked by a noted absence of friends or social connections outside of his immediate family unit.

Following high school graduation, Hasan enlisted in the U.S. Army and was assigned to the National Training Center (NTC) in California. Hasan's performance as an enlisted soldier was also completely unremarkable. He was not subjected to any abuse or discrimination (except that which all young soldiers experience as a matter of discipline)

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[49] Mockaitis, *Violent Extremists*, 101.

[50] Katharine Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism" (Program on Extremism at George Washington University, October 2018), 5.

[51] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 5.

while assigned to NTC.[52] Though only an average student, Hasan was later accepted into Virginia Tech University. He graduated in 1997 with a bachelor's degree in biochemistry and was subsequently accepted into medical school for psychiatry at the Uniformed Services University of the Health Sciences (USUHS). Completion of the program at USUHS would incur an additional military service obligation, which he seems to have desired. It was only during his follow-on internship and residency at Walter Reed Army Medical Center that Hasan would begin to show some troubling signs.

As we will see in later discussion there were clear signs of deepening religious intensity beginning with the death of his mother in 2001. However, there is a difference between increased religiosity and radicalization. In 2003, Nidal Hasan began his internship and residency at Walter Reed and it is here that we identify the most concrete examples of his burgeoning radicalism. Hasan began to display a pattern of "increased isolation from family and colleagues, growing religious conservatism, and the adoption of views typically associated with jihadi-Salafism."[53] While at Walter Reed "Hasan failed to develop any close relationships...[and] according to interviews with his former colleagues, Hasan would never socialize outside of the classroom."[54] It was apparent that Hasan was becoming intentionally distant. In a *TIME Magazine* article one of Hasan's classmates relates "[he] wore his rigid Islamic ideology on his sleeve… He would be standing there in uniform pledging allegiance to the Koran."[55] During this time Hasan was also noted as asserting that Shari'a law transcended the Constitution of the United States and advocated for the legitimacy of suicide bombers.[56] Perhaps more concerning was a series of presentations which Hasan would give as a part of his residency requirements.

Hasan used his presentation periods as opportunities to lecture his classmates on his belief that the war on terror was a war on Islam. It is however, two projects from the

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[52] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 6.

[53] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 8.

[54] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 8–9.

[55] Mark Thompson, "Ft. Hood: Why Were Hasan's Warning Signs Ignored?" *TIME Magazine*, November 18, 2009.

[56] Thompson, "Ft. Hood: Why Were Hasan's Warning Signs Ignored?"

2007–2008 time period that most stand out. In presentations titled "The Koranic Worldview as it Relates to Muslims in the U.S. Military" and "Religious Conflicts among U.S. Muslim Soldiers," Hasan clearly outlined his beliefs that the United States was directly attacking Islam, and that Muslim soldiers facing religious conflicts should be allowed to administratively separate or occupy non-combat positions, lest Muslim soldiers participate in what he termed "adverse events."[57] He was by this point an unstable and conflicted man who tried unsuccessfully to gain conscientious objector status or administrative separation from the military.[58] Hasan received orders to report to Ft. Hood, Texas in the summer of 2009. His colleagues would soon receive an education regarding exactly what he meant in his presentations by "adverse events."

2. Family and Social Connections

As previously noted, Nidal Hasan was a consummate loner. He seems to have had very few social connections other than his immediate family, which he eventually alienated with his increasingly extreme religious views. It is likely that Hasan initially was a harmless and insecure introvert, but as is often the case with maladjusted young men who find social interaction difficult, antisocialism became his defining characteristic. Gradually as time passed, we can imagine that Hasan blamed others for his social failings and eventually lost any impetus to establish a relationship with anything other than his god. While this is conjecture, what is certain is that Hasan had no discernable romantic relationships with either women or men throughout his entire life. His social circle was nonexistent, and so was his support structure.

Perhaps Nidal Hasan's most noteworthy and defining relationship was with his mother who died of cancer in 2001. As her caretaker thought her battle with the disease, Hasan was profoundly affected. Hasan's family was not particularly devout, but tragedy can often push people deeper into their faith for comfort and this is precisely what happened. Only for Hasan, it was not comfort he found, but rather fear. As he grew more religious, he also grew increasingly concerned about his mother's fate in the afterlife. He

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[57] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 9–12.

[58] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 12.

quite literally believed his mother was in jeopardy of spending an eternity in hell, and this fear led to his journey of religious intensification.[59]

Much has been made of Hasan's relationship with the radical al-Qaeda cleric Anwar al-Awlaki. In fact, al-Awlaki presided over Hasan's mother's funeral at the Dar al-Hijra mosque in Virginia. It is clear that al-Awlaki made an impact on Hasan, however in the years to come when Hasan attempted to contact al-Awlaki (in Yemen), he was largely unsuccessful.[60] Katharine Poppe, writing for the George Washington University Program on Extremism states: "Hasan's emails to Awlaki, written between December 2008 and June 2009, are commonly mentioned by scholars in discussions regarding Hasan's case. Based on emerging evidence, however, these emails are a symptom, not the cause, of Hasan's radicalization."[61] It seems that although al-Awlaki was clearly influential, Hasan was well on his path to radicalization before trying to re-establish contact with his former Imam.

3. Path to Radicalization

Nidal Hasan's path to radicalization was relatively straight forward. From his period of religious intensification beginning in 2001 through its eventual manifestation at Ft. Hood in 2009, there was no wavering or detours. The process likely began with the death of his mother and his renewed interest in Islam. His religious intensification was soon followed by a period of growing anger and frustration with what Hasan viewed as a United States led war against Islam. Beginning in 2003, Hasan became enamored with internet videos of sermons by al-Awlaki, leading to numerous attempts to contact him in Yemen for guidance. There is, however, no evidence that al-Awlaki played any part in planning or directing the attack at Ft. Hood. His assertions in presentations at Walter Reed betrayed a belief that violence was justified against the U.S. government by Muslims well before he corresponded with any known terrorist organizations. It is quite likely that Hasan was considering a violent episode against the U.S. government as early as 2006–2007, when

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[59] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 6.

[60] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 14.

[61] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 22.

his conscientious objector status was denied along with a request for administrative separation. At this point it seems, all he needed was a spark to set him to action.

4. Tipping Point

Nidal Hasan's trigger seems to be when he learned that he would deploy to Afghanistan. This occurred in October 2009 (roughly one month before the attack). Since his arrival at Ft. Hood, Hasan had kept little in the way of personal possessions and began donating approximately three-quarters of his income to Islamic charities.[62] In August, Hasan purchased the FN 5–7 pistol he used in the attack and began to spend significant time at a shooting range. When he received deployment orders, it served as his impetus to act. By the first week of November his plan to assault the SRP center was complete, chosen for its concentration of unarmed and unwary American soldiers.

C. BY ANY MEANS AVAILABLE: AN IN-DEPTH ANALYSIS OF MOHAMED LAHOUAIEJ-BOUHLEL

1. Early Life and Education

Mohamed Lahouaiej-Bouhlel was born on January 3, 1985 in M'saken, a minor city of less than 100,000 inhabitants near Tunisia's Mediterranean coast. While little has been documented regarding his adolescent life, what does emerge is a grainy image of an angry, maladjusted youth with a propensity for violence from a very young age. His psychologist recalled from a meeting in 2004, that there existed "the beginnings of psychosis," and that Bouhlel wasn't "living in the real world."[63] He is described by his family as having been an excellent student in high school despite his fragile mental state and was not particularly religious.[64] Throughout his life he was known to have sexual relationships with both women and men as well as a penchant for drug and alcohol abuse.

[62] Poppe, "Nidal Hasan: A Case Study in Lone-Actor Extremism," 14.

[63] Adam Nossiter, Alissa Rubin, and Lila Blaise, "Years Before Truck Rampage in Nice Attacker Wasn't 'Living in the Real World,'" *New York Times*, July 24, 2016, https://www.nytimes.com/2016/07/25/world/europe/nice-france-bastille-day-attacks.html.

[64] Barbara Tasch, "Everything We Know so Far about the Man Suspected of Killing 84 People in Nice, France" (*Business Insider*, July 16, 2016), https://www.businessinsider.com/nice-bastille-day-attack-mohamed-lahouaiej-bouhlel.

It is worth noting that M'saken, Bouhlel's childhood home, is in a region of Tunisia that later became known as a jihadist hot bed. M'saken is adjacent to Sousse, where in 2015, a jihadist gunman killed 38 people during a terror attack on a tourist resort. This attack was the deadliest terror attack (by a non-state actor) in Tunisian history. Though living in Nice at the time of the attack, Bouhlel was almost certainly initially exposed to jihadist ideology as a youth living in M'saken, Tunisia.

2. Family and Social Connections

Bouhlel had a tumultuous relationship with his family from an early age. As a youth, and indeed throughout his entire life, he was subject to violent outbursts, and marked depression. By the age of 16, Bouhlel's parents were so frightened of him that he was kicked out of the family home.[65] He began seeing a mental health professional at the age of 19 following a mental breakdown, and was prescribed antipsychotics, antidepressants, and tranquilizers, though these seem to have had no lasting effect.[66]

He relocated to Nice in 2005 and in 2009 married a French-Tunisian cousin. Together they had three children. Exploitation of his media devices following the attack indicate numerous extramarital affairs, including one with a 73-year-old man.[67] According to the BBC, a French prosecutor described his sex life as "wild," and goes on to reference a lifestyle marked by drugs, alcohol, and abuse.[68] His marriage was also turbulent, and by 2016 he had been estranged from his wife for over two years amid accusations of domestic violence. By most accounts Bouhlel comes across as a sexually confused, philandering loner with very few meaningful relationships. His aggressive nature estranged him from his immediate family and his propensity for violence wreaked havoc on his marriage. In

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[65] Nossiter, Rubin, and Blaise, "Years Before Truck Rampage in Nice Attacker Wasn't 'Living in the Real World.'"

[66] Nossiter, Rubin, and Blaise, "Years Before Truck Rampage in Nice Attacker Wasn't 'Living in the Real World.'"

[67] Matt Payton, "Nice Attacker Mohamed Lahouaiej-Bouhlel Watched ISIS Beheading Videos and Dated 73-Year-Old Man" (*Independent*, July 16, 2016), https://www.independent.co.uk/news/world/europe/nice-attack-attacker-isis-videos-mohamed-lahouaiej-bouhlel-terror-truck-victims-france-a7142646.html.

[68] "Attack on Nice: Who Was Mohamed Lahouaiej-Bouhlel?," BBC News, August 19, 2016, https://www.bbc.com/news/world-europe-36801763.

the months preceding the attack Bouhlel would further alienate himself from his non-familial social circle by his growing fascination with violent jihadist propaganda.

3.   Path to Radicalization

Despite numerous arrests for petty crime "[F]rench authorities never opened a security file on Bouhlel because he had no known ties to any terrorist or jihadist group."[69] His capacity for violence was well known, yet few would have noticed his burgeoning radicalization. In 2016, the Associated Press published an account from Bouhlel's uncle claiming that his nephew had been in contact with an ISIS recruiter approximately two-weeks prior to the attack, but this claim remains unsubstantiated.[70] Existing evidence points to this being very unlikely, but it cannot be ruled out. What is certain is that in the weeks or perhaps months leading up to the attack, he fell increasingly prey to ISIS's most effective messenger—the internet. Friends maintained that Bouhlel became enamored with violent extremist videos on the internet, especially ISIS beheadings. Due to his increasingly radical beliefs, he began to distance himself from those who did not share his new ideology and thus spent more time with those who shared his beliefs. Again, it is unknown how much his new acquaintances contributed to his radicalization, but at least five provided varying degrees of support for his attack plans and were subsequently arrested for conspiracy.

Bouhlel clearly suffered from mental illness, likely undiagnosed borderline personality disorder. In his life of increasing chaos, it is plausible that he sought something to provide balance and meaning, and thus turned to Islam. It seems that Bouhlel hit a breaking point in his personal life and turned to religion, and it is also likely that his fragile mental state left him very susceptible to rapid and extreme radicalization. If this is the case, he would not have needed a physical recruiter. He was sexually confused and emotionally unbalanced; he had a tumultuous upbringing and unstable family life; he suffered from a

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[69] Steve Visser and Alanne Orjoux, "Who Was Mohamed Lahouaiej Bouhlel" (CNN, July 17, 2016), https://www.cnn.com/2016/07/15/europe/nice-france-terrorist-driver/index.html.

[70] Barbara Tasch, "The Nice Killer Who 'had Problems with His Body' Was Radicalized Just 2 Weeks before the Attack" (*Business Insider*, July 18, 2016), https://www.businessinsider.com/isis-the-nice-killer-radicalised-2-weeks-before-the-attack-2016-7.

poor self-image and body dysmorphia—all these factors combined to create an individual already groomed for violent radicalization, and ISIS's message provided the necessary impetus for action. Indeed, French radicalization expert Dounia Bouzar claims this psychological profile is all too common amongst extremists.[71] Like many others who radicalize and seek martyrdom, it is quite likely that Mohamad Lahouaiej-Bouhlel was attempting to atone for his sins and seek forgiveness.

4. Tipping Point

The tipping point was simply opportunity. The Bastille Day celebration on the Promenade des Anglais in Nice draws thousands of revelers to a very condensed thoroughfare creating a perfect kill zone. Bouhlel identified a national celebration and a method of execution to inflict maximum casualties and garner significant media attention. He used his credentials as a delivery driver as an effective cover for status, and the pretense of delivering ice cream to the celebration as a cover for action. Interrogation of his mobile phone indicated numerous photographs detailing his reconnaissance efforts during the preceding 48-hours, but it is likely that the attack was well planned months in advance.

D. WORKPLACE VIOLENCE WITH A JIHADI TWIST: AN IN-DEPTH ANALYSIS OF SYED RIZWAN FAROOK AND TASHFEEN MALIK

1. Early Life and Education

Syed Rizwan Farook was a second-generation American born of Pakistani parents. While it is alleged that his childhood home was abusive and troubled, Farook graduated from high school a year early and then went on to graduate from California State University-San Bernardino with a bachelor's degree.[72] He appeared to be normal as an adult, with a dating app profile listing target practice as a hobby and being described by

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[71] Tasch, "The Nice Killer Who 'had Problems with His Body' Was Radicalized Just 2 Weeks before the Attack."

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[72] Philip L. Reichel and Ryan Randa, *Transnational Crime and Global Security [2 Volumes]* (ABC-CLIO, 2018), 293.

coworkers as "pleasant."[73] He was described as a devout Muslim, often attending prayers twice a day at the local mosque. He did however keep his distance from the rest of the mosque goers, and he allegedly stopped attending once he married Tashfeen Malik.[74] He also traveled to Saudi Arabia several times, including to complete the hajj.[75] There appears to be conflicting reports on whether his family knew the true depth of his radicalization, and how complicit they were in the attacks. While none of the ascribed traits in themselves are noteworthy, nor should they be the impetus for elevated law enforcement suspicions in the U.S., they are indicators that the local community could be on the watch for. This local community is the imam, mosque congregants, and his family in this case, but could be translated to any social group of any ideology that is susceptible to extremist tendencies.

Tashfeen Malik was born in Pakistan and spent most of her life between there and Saudi Arabia. She attended a strict women-only religious school while in Saudi Arabia. This school allegedly teaches hard line Salafist interpretations of Islam and caters to women from more well-off and influential families.[76] Prior to that, she attended pharmacology school in Pakistan, graduating in 2012.[77] In early 2014, Farook traveled to Saudi Arabia to see Malik after they met on the internet. Shortly thereafter she entered the U.S. on a fiancé visa and underwent the requisite security interviews and database searches to get a green card.[78] In the years prior to the attack, she was reported to have become

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[73] Rick Braziel et al., "Bringing Calm to Chaos: A Critical Incident Review of the San Bernardino Public Safety Response to the December 2, 2015, Terrorist Shooting Incident at the Inland Regional Center," Article, Homeland Security Digital Library (United States. Department of Justice. Office of Community Oriented Policing Services, United States. Department of Justice. Office of Community Oriented Policing Services, January 1, 2016), 26, https://www.hsdl.org/?abstract&did=.

[74] "San Bernardino Shooting Suspect Stopped Attending Mosque Two Years Ago," *Los Angeles Times*, December 3, 2015, https://www.latimes.com/local/lanow/la-me-ln-san-bernardino-shooting-suspect-serious-about-studying-the-koran-20151203-story.html.

[75] "San Bernardino Suspects Left Trail of Clues, but No Clear Motive," *New York Times*, accessed June 13, 2020, https://www.nytimes.com/2015/12/04/us/san-bernardino-shooting.html.

[76] Salman Masood and Declan Walsh, "Tashfeen Malik, San Bernardino Suspect, Attended Conservative Religious School in Pakistan," *New York Times*, December 7, 2015, https://www.nytimes.com/2015/12/08/world/asia/tashfeen-malik-attended-conservative-religious-school-in-pakistan.html.

[77] "San Bernardino Assailant Attended Islamic Institute in Pakistan," *Los Angeles Times*, December 6, 2015, https://www.latimes.com/world/afghanistan-pakistan/la-fg-pakistan-san-bernardino-20151206-story.html.

[78] *New York Times*, "San Bernardino Suspects Left Trail of Clues, but No Clear Motive."

very religious, to the point of radicalization. She adopted very hard line views of Islam, and her family said she left their moderate Islam for her perverted version while in Saudi Arabia.[79] Malik, as a Muslim woman, is a very rare type of mass shooter terrorist, especially because she may have been the more important driving force behind the attacks.

2. Family and Social Connections

Farook's brother, Raheel Farook, served in the U.S. Navy and deployed twice to Iraq.[80] He appears to have been a normal outgoing citizen, compared to his brother who was often described as an introvert or anti-social.[81] Raheel was later implicated in, and pled guilty to, a conspiracy to commit immigration fraud by lying about the sham marriage of his wife's sister and one of Farook's friends, Enrique Marquez.

Malik's father, according to her uncle, had adopted a more hardline version of Islam once he moved the family to Saudi Arabia. This may be where Malik's journey started before delving deeper into Salafism in her schooling.

Farook and Malik lived by or with Farook's family. They had very close relationships with his mother and his brother. Just like in Omar Mateen's case, law enforcement attempted to make a case that there is no way the family did not know of the pending plans. While they might not have known the exact details, it is hard to believe they were oblivious. But just as there is difficulty identifying a member of your community as a threat, singling out a member of your family to law enforcement is often unlikely.

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[79] "Pakistani in California Shooting Became Hardline in S. Arabia - Relatives," Reuters, December 6, 2015, https://www.reuters.com/article/california-shooting-pakistan-idUSKBN0TO0MB20151206.

[80] "FBI Arrests Brother of San Bernardino Terrorist and 2 Others on Marriage Fraud Charges," *Los Angeles Times*, April 29, 2016, https://www.latimes.com/local/lanow/la-me-ln-fbi-serves-san-bernardino-warrants-20160428-story.html.

[81] "Brother of San Bernardino Mass Shooter Pleads Not Guilty to Marriage Scam," *New York Daily News*, accessed June 12, 2020, https://www.nydailynews.com/news/national/brother-san-bernardino-shooter-arrested-marriage-scam-article-1.2617665.

3.   Path to Radicalization

The two appeared to be planning the attack for a few years prior (perhaps even prior to being engaged).[82] In fact, they seem to have begun radicalizing before they even met, and before ISIS's propaganda started to sweep the world.[83] It remains difficult to determine exactly which group or version of the ideology specifically contributed to their radicalization, and if they would have acted had ISIS not been gaining power and popularity. As with other such terrorists, it did not matter if they had an affiliation with the group, ISIS would declare them soldiers of the caliphate to keep building their brand and to spin more propaganda.

Regardless, the couple had clearly radicalized and were planning a violent event for some time. They amassed thousands of rounds of pistol and rifle ammunition, as well as various bomb making materials.[84] As far back as 2011, authorities allege Farook was planning to conduct terror attacks in San Bernardino with a neighbor and converted Muslim, Enrique Marquez. Marquez would later plead guilty to charges stemming from his part in acquiring the weapons Farook and Malik would later use.[85] This also appears to be when Farook began intensively exploring extremist material, as it is alleged he and Marquez would spend hours engrossed in *Inspire* and online speeches from Anwar al-Awlaki.[86]

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[82] "San Bernardino Shooters Radicalized Before They Met: FBI," NBC News, accessed June 12, 2020, https://www.nbcnews.com/storyline/san-bernardino-shooting/fbi-san-bernardino-shooters-radicalized-they-met-n476971.

[83] "San Bernardino Attackers Discussed Jihad in Private Messages, F.B.I. Says," *New York Times*, accessed June 12, 2020, https://www.nytimes.com/2015/12/17/us/san-bernardino-attackers-discussed-jihad-in-private-messages-fbi-says.html.

[84] "Lawmaker: Too Soon to Say If Shooter Radicalized," WEAU, accessed June 12, 2020, https://www.weau.com/home/headlines/NEW-INFORMATION-Police-search-home-in-connection-to-shooting-360424831.html.

[85] Adam Nagourney, Richard Pérez-Peña, and Ian Lovett, "Neighbor of San Bernardino Attackers Faces Terrorism Charges," *New York Times*, December 17, 2015, https://www.nytimes.com/2015/12/18/us/san-bernardino-enrique-marquez-charges-justice-department.html.

[86] Marina Koren, "The First Criminal Charges in the San Bernardino Shooting," *Atlantic*, December 17, 2015, https://www.theatlantic.com/national/archive/2015/12/san-bernardino-gun-charges/420966/.

A couple weeks prior to the attack, Farook took out a $28k loan, and then transferred roughly $10k to his mother's account. He also made another $10k transfer, which authorities initially believed may be payment for the rifles used in the assault.[87]

4.   Tipping Point

The last straw was likely Farook's forced attendance at an office Christmas party. On her social media, Malik expressed displeasure that Farook would have to attend this non-Muslim holiday party.[88] It was at this party that Farook and Malik would ultimately orchestrate their attack.

Each of the individuals in the above case studies traveled their own unique paths to radicalization. Yet they share significant similarities. As we shall see, connections can be made across cases to develop a useful profile for identification of at-risk individuals.

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[87] "Bank Records Show $28,500 Deposit to Syed Farook's Account Two Weeks before the Shooting, Source Says," Fox News, accessed June 13, 2020, https://www.foxnews.com/politics/bank-records-show-28500-deposit-to-syed-farooks-account-two-weeks-before-the-shooting-source-says.

[88] "Christmas Party May Have Triggered San Bernardino Terror Attack: Police," ABC News, accessed June 12, 2020, https://abcnews.go.com/US/christmas-party-triggered-san-bernardino-terror-attack-police/story?id=43884973.

VI.   CONCLUSIONS: WHAT DOES THIS ALL MEAN?

From the analysis of four case studies we have extrapolated seven factors shared between individuals and events across time and space which could prove most useful in preemptive identification (Table 3). The first five factors are present in every case and should be considered primary indicators. The subsequent two factors were present in 75% of cases studied and appear to have a high correlation to radicalization. Also, due to their sociological nature they are particularly interesting. Collectively, any combination of factors is cause for concern, but it is worth noting the fewest indicators observed in any individual case was 5 out of 7 (Farook and Malik). Nidal Hasan, Mohamed Lahouaiej-Bouhlel, and Omar Mateen each displayed all seven indicators.

Table 3.   Commonalities per Case Study

Variable	Mateen	Hasan	Bouhlel	Farook/Malik
Engrossment in radical messaging / propaganda on the internet	X	X	X	X
First or second-generation immigrant	X	X	X	X
Reduction of personal effects / finances	X	X	X	X
Affinity with extremist group(s)	X	X	X	X
Rapid shift in beliefs / mosque attendance	X	X	X	X
Withdrawal from, or absence of family / friends / romantic relationships	X	X	X	
Sexuality (repression or guilt)	X	X	X	

A.   ENGROSSMENT IN RADICAL MESSAGING / PROPAGANDA ON THE INTERNET

Possibly the best predictive indicator for a burgeoning lone wolf is internet activity. This should be of little surprise given the internet is the most effective means for the stochastic terrorist to cast a wide net. In fact, AQAP's digital magazine *Inspire* is practically dedicated to it. Scholars point this out as well, as noted by Raffaelo Pantucci

The internet is clearly the running theme between most of the plots included in this dataset [of lone wolf terrorists] and it appears to be a very effective tool: it provides a locus in which they [lone wolves] can obtain radicalizing material, training materials and videos. It provides them with direct access to a community of like-minded individuals around the world with whom they can connect and, in some cases, can provide them with further instigation and direction to carry out activities. Many of the individuals in the dataset demonstrate some level of social alienation—within this context, the community provided by the internet can act as a replacement social environment that they are unable to locate in the real world around them.[89]

This behavior is predominant in all four case studies. Mateen investigated extremist literature online every day for months prior to his attack, and like Bouhlel, became enamored with ISIS's execution videos. Hasan likewise became so engaged with the online sermons of Anwar al-Awlaki that he ultimately attempted to contact him in Yemen. Law enforcement alleges Farook was engrossed in online propaganda as far back as 2011. His online interests featured AQAP's digital *Inspire* magazine and a multitude of Anwar al-Awlaki's sermons. From their private conversations it is evident Farook and Malik were talking about jihad and extremism very early in their courtship, but as the FBI stressed, these were private messages, not publicly available on their social media, so law enforcement did not have access to them.

It seems this process of online radicalization remains relatively consistent and begins with increased indoctrination from online sermons by ideologues like Suri and Awlaki, progressing to more base and violent videos. ISIS produced no shortage of slick propaganda to feed the desire for inspirational and violent content. Additionally, prospective lone wolves will likely draw inspiration and support from like-minded individuals within internet chat rooms, but this is not unique to jihadists. Current trends indicate that other violent fringe movements operate in the same way. The online community provides a dangerous level of relative anonymity which inspires people to comment and discuss ideas and opinions they might otherwise not. As the process continues, confidence, delusion, and disillusionment grow.

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[89] Raffaello Pantucci, "A Typology of Lone Wolves: Preliminary Analysis of Lone Islamist Terrorists" (International Centre for the Study of Radicalisation (ICSR), March 2011), 34, https://icsr.info/wp-content/uploads/2011/04/1302002992ICSRPaper_ATypologyofLoneWolves_Pantucci.pdf.

B.   FIRST OR SECOND-GENERATION IMMIGRANT

There is ample evidence that this is the demographic stochastic terrorists actively target—and which, in turn, is most susceptible to their message. Recent Muslim immigrants may seek out belonging, absent a sense of connection to their home and culture as result of perceived "ambient racism."[90] Terrorist organizations then capitalize on this lack of, and desire for, identity. ISIS's recruiting, for example, aims to divide vulnerable young men from often-tenuous societal ties with the promise of an Islamic utopia. Now, since the caliphate's collapse, they are more often encouraged to stay in the West and attack soft targets there.

Olivier Roy has written extensively on this phenomenon, specifically within Europe. "All of these preachers and organizations target second generation Muslims, explicitly playing on their sense of being victims of racism, exclusion and loneliness in the West."[91] This seems to be both an issue of identity and assimilation and is certainly not confined to Europe. Roy continues, "[m]any whether settled in the West or studying there, became born-again Muslims and turned politically radical soon after."[92] Again, we observe this aspect in all four case studies.

Bouhlel was a Tunisian immigrant from France. Hasan was born in the United States to Palestinian parents. Neither were raised particularly religious. Nor was Omar Mateen, whose parents were Afghan emigrants to America. Syed Farook was second generation born to Pakistani parents, while his wife, Tashfeen Malik was born in Pakistan and spent most of her life there and in Saudi Arabia. Much like engrossment in radical online messaging, there seems to be significant correlation between this demographic and increased risk for radicalization, as Roy has noted. Actual discrimination surely plays a part, but it seems far more likely that it is the perception of injustice and relative inequality that are the primary factors which are easily exploited by stochastic terrorists. Susceptible

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[90] Olivier Roy, *Globalized Islam: The Search for a New Ummah*, The CERI Series in Comparative Politics and International Studies (New York, NY: Columbia Univ. Press, 2004), 165.

[91] Roy, *Globalized Islam: The Search for a New Ummah*, 309.

[92] Roy, *Globalized Islam: The Search for a New Ummah*, 308.

actors may then inevitably seek a sense of purpose, community, and belonging by retreating further into their faith, a radicalized cyber-community, or their own minds.

C. REDUCTION OF PERSONAL EFFECTS / FINANCES

Much as it is a warning sign for suicide, the giving away of possessions and/or money before a lone wolf attack appears commonplace. Most Islamist lone wolves do not intend, nor expect to survive the attack. All our case studies resulted in the attacker's death at the hand of law enforcement except for Nidal Hasan, who was admittedly disappointed he was not killed, but rather paralyzed from a gunshot wound to the spine. In every case the attacker(s) engaged in a firefight with police, in essence attempting suicide by cop. Likewise, in every case, the perpetrators transferred significant assets in the days and weeks leading up to the attack.

Adam Lankford contends that suicidal motives and life indifference are traits common to both mass shooters and suicide terrorists.[93] The challenge then becomes assigning indicators which signify these traits. Most Islamist lone wolves fall into the "cult of martyrdom" camp which honors and glorifies death (there remains significant debate regarding the characterization of these actors as suicidal), but evidence indicates that even individuals preparing for this type of death will make certain preparations. The giving away of possessions or making arrangements for the welfare of loved ones is principal among them.[94]

Farook transferred $10K to his mother shortly before the attack in San Bernardino, and Bouhlel conveyed his life's savings (£84,000) to his family in Tunisia, while Mateen signed over his share of a house to his sister (for $10).[95] Hasan, ever the traditionalist, began donating 75% of his income to Islamic charities, but perhaps more telling was that

[93] Adam Lankford, "Identifying Potential Mass Shooters and Suicide Terrorists With Warning Signs of Suicide, Perceived Victimization, and Desires for Attention or Fame," *Journal of Personality Assessment* 100, no. 5 (September 3, 2018): 472, https://doi.org/10.1080/00223891.2018.1436063.

[94] Lankford, "Identifying Potential Mass Shooters and Suicide Terrorists With Warning Signs of Suicide, Perceived Victimization, and Desires for Attention or Fame," 475.

[95] "Orlando Gunman Had Turned over Share of House to Relatives for $10," Fox News, June 17, 2016, https://www.foxnews.com/us/orlando-gunman-had-turned-over-share-of-house-to-relatives-for-10.

upon arrival to Fort Hood he had so diminished his personal belongings that he basically lived in an empty apartment. Hindsight informs us that none of these were simple acts of generosity, but rather the actions of terrorists committed to die.

D.   AFFINITY WITH EXTREMIST GROUP(S)

The vocalization of support for extremist groups is one of the most telling signs of burgeoning radicalization. This is in concert with Hamm and Spaaij's radicalization model (Table 1), in fact "[o]ne of Spaaij's essential findings is that lone wolf terrorists draw on beliefs and ideologies of validation generated and transmitted by extremist movements. This facet of radicalization was measured by the lone wolf's affinity with an extremist group."[96] Unfortunately, this aspect, though often noted, seems to be regularly ignored by family, and in at least two cases mis-evaluated by law enforcement. The affinity for extremist groups is present to varying degrees in each of the cases studied and was rarely subtle.

Nidal Hasan was alarmingly open regarding his support for anti-coalition insurgencies in both Iraq and Afghanistan, as well as his defense of suicide bombers and belief in a wider U.S. war directed against Muslims. Unfortunately, Hasan's superiors, likely acting from a misguided sense of political correctness turned a blind eye to his assertions. Over a six-month period from 2008–2009, Hasan sent over a dozen emails to Anwar al-Awlaki in Yemen. These exchanges put Hasan on the FBI's radar, but the Bureau did not identify him as an imminent threat and failed to investigate further, possibly due to Hasan's status as a military officer. Likewise, Omar Mateen from an early age claimed connection to numerous (and often competing) extremist groups and was chastised at school for celebrating the 9/11 attacks. Mateen was investigated by the FBI, and like Hasan was also deemed not to be an imminent threat. Ultimately Mateen would pledge allegiance to ISIS in the midst of his Orlando rampage.

The other two case studies are less conclusive. There is no concrete evidence that Malik or Farook showed affinity for any particular extremist group, but there is ample

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[96] Hamm and Spaaij, *The Age of Lone Wolf Terrorism*, 150–51.

evidence to infer their support for jihadist groups writ large. Farook's father stated his son shared the ideology of Abu Bakr al-Baghdadi and ISIS did claim that he and Malik were "soldiers of the caliphate" post attack, which although anecdotal, does suggest a connection. Likewise, relatives of Mohamad Lahouaiej-Bouhlel commented on his support for ISIS. Bouhlel's support for extremist groups also manifested itself in the screening of violent ISIS videos with his associates. In both cases there was clearly some level of preemptive familial recognition of radicalization and affinity, however neither Malik and Farook, nor Bouhlel ever overtly claimed allegiance to a specific group or organization while alive.

E.   RAPID SHIFT IN BELIEFS / MOSQUE ATTENDANCE

Individuals in our target demographic displayed a sudden and extreme shift in their religious beliefs and/or practices. Olivier Roy also notes this trend regarding radicalization of jihadis in general. According to Roy, regardless of religiosity prior to radicalization, most displayed this rapid shift. In fact, the majority of jihadis were altogether irreligious, often involved in drugs, alcohol, sexual escapades, and other Western vices.[97] Many, it seems, attempted to "make up for lost time" through fanatical devoutness. In 75 percent of the cases we analyzed, the individuals were raised secular. Then as the result of a traumatic life event or perception of personal or group persecution, radicalized quickly and severely. In fact, all but Farook and Malik were raised in relatively secular families, and because of this, their change was marked and obvious. But even Farook and Malik displayed behavioral anomalies regarding their patterns of mosque attendance.

When Nidal Hasan found religion, he dove all-in. Due to the circumstances which led him back to religion (his mother's death and lack of social network), Islam became the all-engrossing dominant force in his life. He rapidly became excessively argumentative and dismissive of dissenting opinions and beliefs. His aggressive proselytizing and need to weave religious themes into all conversations were also a matter of concern. Both his colleagues at Walter Reed and his family members noted how Hasan could not and would

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[97] Roy, *Globalized Islam*, 310–11.

not have a conversation without integrating radical religious themes. Additionally, he sought opportunities and forums to espouse his radical views at wildly inappropriate times. Convinced the United States was prosecuting an unlawful war against Islam, Hasan publicly praised suicide bombers and argued that Shari'a superseded the U.S. constitution and all other secular laws.

Although an exact date cannot be determined, it is clear that Bouhlel radicalized over a period of months or weeks as opposed to years. He too was raised secular and lived as such for most of his life. He drank alcohol, ate pork, and had many sexual partners. This changed as Bouhlel also attempted to make up for lost time by becoming hyper-devout. According to one profiler of Bouhlel: "[i]n the time leading up to the act, he began to abstain from alcohol, women and salsa dancing, growing a beard and making remarks in favor of ISIS."[98] It is also alleged that Bouhlel only began visiting a mosque regularly three months prior to the attack.

Omar Mateen and Bouhlel, who also shared patterns of domestic violence and homosexuality, also became decidedly more vocal about their beliefs in their final weeks of life. Leading up to the Pulse nightclub attack, Mateen's mosque attendance actually waned, though he compensated with increased consumption of jihadist literature, propaganda, and rhetoric, while stating his desire to become a "martyr."[99] Thus, while the obvious indicator in most cases is a rapid shift towards extremist and hardline Islamic views, a better and more generic indicator may just be this "anomaly detection." Likewise, Farook, who had regularly prayed and attended mosque services, allegedly stopped attending mosque altogether when he married Malik and their radicalization progressed covertly behind closed doors. In each of the cases studied, family and friends, with the advantage of hindsight were able to identify this anomalous behavior, but in the moment failed to recognize this warning sign as such.

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[98] Jean-Pierre Bouchard, "Profile of the perpetrator of the Nice terror attack that took place on 14th July 2016: A terrorist whose modus operandi may have been imitated in other European attacks" (Elsevier Masson SAS, 2018), 608.

[99] Lankford, "Identifying Potential Mass Shooters and Suicide Terrorists With Warning Signs of Suicide, Perceived Victimization, and Desires for Attention or Fame," 478.

F.   WITHDRAWAL FROM, OR ABSENCE OF, FAMILY, FRIENDS, AND ROMANTIC RELATIONSHIPS

In three of four cases studied (Malik and Farook being the exception), as radicalization progressed, outside relationships were either strained or absent, and often intentionally so. Two cases were marked by domestic violence and volatility, as previously noted, and collectively the group suffered from an inability to either create or sustain positive social, familial, and/or romantic relationships. Although Hasan never enjoyed such relationships to begin with, he, Mateen, and Bouhlel all displayed a combination of social awkwardness, antisocial behavior, resignation, and aggression. This was especially true regarding others who held opposing beliefs.

Hasan, always an introvert, became aggressively antisocial as he radicalized. Following the trauma of his mother's death, he withdrew further from both society and family. He was never known to have any form of intimate or sexual relationship, nor did he have any discernable friendships. Additionally, Hasan lost interest in his medical professional development in favor of the independent religious study that consumed his life.

Omar Mateen, likewise, alienated his family and had no discernable friends, though he was twice married. His first marriage ended after four months amidst allegations of physical and emotional abuse. The second lasted longer, but not by much—the couple separated following four years, again marked by patterns of domestic abuse. In 2016, the year of the Pulse attack, Mateen's Imam remarked he had become noticeably more isolated and "reclusive." Also, like Bouhlel, the question of Mateen's sexuality looms large over his personal and emotional conflicts.

Bouhlel withdrew from his immediate family at an early age, culminating in his emigration to France. Regardless of location his violent outbursts created fear and animosity within his family unit. When he did marry, his violence and erratic behavior estranged him from his wife and children. Though he did have "friends" they were predominantly friends of convenience whom he either met at the gym or through work. As he increasingly radicalized, he separated himself from those acquaintances and developed new friends of convenience based on his evolving interests (radical Islam). Throughout his

life, his social contacts were situational, superficial, and manipulative—quite indicative of sociopathic tendencies. He did not develop any consistent long-term friendships. Although he had numerous sexual liaisons with both men and women, these too were unstable and manipulative. In fact, Bouhlel's confused sexuality is likely one of the major contributing factors of his personal guilt.

G.   SEXUALITY (REPRESSION OR GUILT)

Perhaps one of our more controversial observations is the role of sexuality in the radicalization process. Though Sageman contends that sex and terrorism have no correlation, we find that assertion to be false.[100] Whereas ISIS may have drawn many recruits with the promise of sex slaves and wives within the caliphate, there seems to be a different dynamic entirely within the lone wolf population. This aspect warrants additional study as it is rather nebulous, yet undeniable. There appears to be an element of sexual frustration, sexual confusion, repressed sexuality, and/or sexual guilt manifest in the population. Certainly, present are instances of repressed homosexuality, which seem to play out as guilt, anger, domestic violence and/or hypersexuality. Conversely, much like the school shooter demographic, there also exists a population who have difficulty interacting with potential sexual partners, which manifests in frustration, rage, and perceived persecution.

Certainly, there are questions regarding the sexual orientation of Bouhlel and Mateen. Bouhlel was probably bisexual, having had intimate relationships with both men and women. He was referred to as "hyper-sexual," that is, until he radicalized and seems to have attempted to atone for his sins. Mateen, likely a repressed homosexual, possibly never acted on his urges, though they would manifest in domestic violence, misogyny, and overt homophobia, again, as an over-correction. Both presumably had issues reconciling their sexuality with their religion.

Conversely, Nidal Hasan never had any discernable sexual relationship with anyone of either sex. Hasan had an inability to form relationships of any sort. He shares

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[100] Marc Sageman, *Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008), 62.

much in common with the involuntary celibate (INCEL) community. The INCEL community has coincidentally been linked with numerous contemporary mass shootings, usually targeting groups the shooter blames for their forced celibacy (women, athletes, etc.). Malik and Farook possessed a stable heterosexual relationship, making them an outlier in this study.

VII. EPILOGUE AND PROGNOSIS

For nearly twenty years the United States has focused the lion's share of its intellectual and military efforts on combatting radical Islam. The issue of terrorism, though universal, is far less of an existential threat than the multidimensional challenges posed today by both Russia and China—yet the threat posed by Abu Musab al-Suri's legacy persists—manifest in *jihad fardi*. Although the destruction of ISIS's physical caliphate has rendered the organization less deadly, it is no less dangerous.

It is likely true that the face of war has changed forever due to advances in information technology, and so has the face of modern global jihad. ISIS's vestige will be the durability of its message and ability to inspire Suri's vision of individual jihad well into the future. It is this new face of terrorism with which security practitioners must contend, and there is much to learn from the cases analyzed in this study. Each displayed numerous indicators, and as we have seen most, if not all were ignored. In a time of increased racial tensions, rife with identity politics, this is concerning. For just as we would not desire infringement on civil liberties by racial profiling, we must be equally vigilant not to turn a blind eye due to political correctness. It is precisely the societal desire within Western liberal democracies to be accepting that the stochastic terrorist looks to exploit.

The unfortunate truth about Nidal Hasan's attack at Ft. Hood is that it should never have happened. Hasan overtly displayed all seven warning signs advanced by this study. More damning, as stated in a U.S. Senate investigation report:

> Evidence of Hasan's radicalization to violent extremism was on full display to his superiors and colleagues. An instructor and a colleague each referred to Hasan as a 'ticking time bomb.' Not only was no action taken to discipline or discharge him, but also his Officer Evaluation Reports sanitized his obsession with violent Islamic extremism into praiseworthy research on counterterrorism.[101]

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[101] Joseph I. Lieberman and Susan M. Collins, "A Ticking Time Bomb: Counterterrorism Lessons from the U.S. Government's Failure to Prevent the Fort Hood Attack" (United States Senate Committee on Homeland Security and Government Affairs, February 3, 2011), 8.

One can speculate that Hasan was not disciplined early on due to the sensitive political climate within the U.S. military, and it is likely that his superior officers did not want to risk being labeled racist, or discriminatory, in an organization that prides itself on diversity.

Mohamed Lahouaiej-Bouhlel also displayed all seven warning signs. Unfortunately, due to fear, apathy, or both, his family, friends, and acquaintances ignored them all. As is often the case for those suffering from mental illness, many troubling signs were simply written off as symptoms of his troubled mental state. Bouhlel clearly had psychological issues from an early age which left him more susceptible to radicalization. It is likely he was a sociopath (lacking any capacity for empathy) and suffered from borderline personality disorder. He also suffered from a poor body image and low self-esteem, which he attempted to compensate for with arrogance and an obsession with body building. His emotional imbalance and personal insecurities were certainly contributing factors as they led to him wanting to matter—to be a martyr.

Like Bouhlel, Omar Mateen was an angry, sexually confused, mentally troubled young man. He also displayed all seven warning signs, and like both Bouhlel and Hasan, these were largely ignored by family, friends, and law enforcement. His is a case of a family not admitting what is readily apparent before their very eyes. He abused two wives, was overtly racist and misogynistic, displayed antisocial tendencies, and had an affinity for extremist groups. Also, like the others, Mateen was deeply unhappy and believed that "nothing can enlarge a small life like a big death."[102] Unfortunately, no one took him seriously.

Syed Farook survived a troubled childhood to find love and marriage with Tashfeen Malik. He had a bachelor's degree and a good job. Malik successfully emigrated to the United States, and with Farook had a daughter. Yet her extremist sympathies were clear to those around her, and Farook's radicalization was clearly noticed by his father, who

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[102] Jeffrey Kluger, "This Is What Drove the Orlando Killer" (*TIME Magazine*, June 2016), https://time.com/4368275/mateen-orlando-why-he-killed/.

commented on his affinity for ISIS—posthumously. Collectively, they displayed five of seven indicators, which, like the others were unduly ignored.

Although based on a relatively small amount of case studies, the similarities between these cases are striking. The seven proposed indicators provide a useful framework for analysis and serve as a cautionary tale regarding the cost of ignorance. Perhaps not as defining as the homicidal triad, the indicators should be viewed with the same scrutiny as indicators of drug use. The presence of a singular indicator may be rather benign, however, when viewed in the aggregate, these indicators should be heeded as warning signs of likely radicalization. If ignored, by family, friends, law enforcement, etc., it may simply require a tipping point or event, as evinced from the case studies, to propel someone to extreme violence. Additional research should be conducted, in accordance with this methodology, to analyze every available case of a lone wolf jihadist attack (post 9/11) to confirm these findings and refine this thesis.

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